

## **CALCIUM PHOSPHATE-BASED SUSTAINED RELEASE MATERIAL FOR DRUG AND ITS PRODUCTION**

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### **Abstract of JP6228011**

**PURPOSE:** To obtain a sustained release material for drug capable of more firmly bonding and keeping a drug in a hard biotissue, easily controlling the releasing rate of the drug and getting a more effective sustained release effect and to provide a production method for the sustained release material.

**CONSTITUTION:** Tetracalcium phosphate is compounded with hydrogen calcium phosphate or its dihydrate at a ratio to get a molar Ca/P ratio corresponding to that of the hydroxyapatite composition and the obtained self-curable calcium phosphate cement composition is used as a base for holding a drug. The calcium phosphate cement composition is incorporated with 25-70wt.% of an aqueous solution of phosphoric acid having a concentration of 0.1-0.3 m-mol/L and the mixture is kneaded and cured to obtain a cured material having a void ratio controlled to 20-60% and having controlled releasing rate of the drug maintained in the cured material.

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